Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A solid oxide fuel cell which is characterized in that a solid oxide fuel cell having a fuel electrode, an electrolyte, and an air electrode is produced, wherein four sides or opposite two sides of corners of a single cell are downwardly bent in an inverted U shape, and gas channels are formed in an inner side and/or an outer side of the same.

2. (Currently Amended) The cell according to claim 1, wherein said single cell has gas channels [[a gas channel]] in an inner and/or outer portion of the same as a porous fuel electrode support having a triple film or multiple films in which an electrolyte is densely coated on or in the entire upper surface of the flat plate and the entire portions of the bent portion and support or a part portion of the same in a single cell in which corner portions are downwardly bent in the vertical direction, and a porous air electrode is coated on the upper portion in which the electrolyte is coated.

3. (Original) The cell according to claim 2, wherein said fuel electrode support, the gas channel are formed in a structure or a lattice structure in a straight line.

4. (Currently Amended) The cell according to claim 2 [[or 3]], wherein the cross sections of the downwardly bent portions and the straight structure or the lattice structure of the gas channel formed in the fuel electrode support may be formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle, or may have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.

5. (Original) The cell according to claim 1, wherein said single cell is formed of a triple layer or multiple layer porous air electrode support in which an electrolyte is densely coated in the entire portions of the lower surface of a flat portion in which an end portion is vertically and downwardly bent, and in the entire portions or a partial portion of the bent portion and the support, and a porous fuel electrode is coated on the lower portion on which the electrolyte is coated, said single cell having gas channels in an inner side and/or outer side.

6. (Original) The cell according to claim 5, wherein said air electrode support, the gas channels are formed in a straight line structure or a lattice structure.

7. (Currently Amended) The cell according to claim 5 [[or 6]], wherein cross sections of the downwardly bent portions and the straight structure or the lattice structure of gas channels formed in the air electrode support are formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle or have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.

8. (Original) The cell according to claim 1, wherein said single cell is formed of an electrolyte support formed of a triple layer or a multiple layer in which a fuel electrode is coated in a lower portion of a flat portion in which an end portion is vertically and downwardly bent, and an air electrode is coated on an upper portion of the electrolyte, said single cell having gas channels in an inner side and/or an outer side.

9. (Original) The cell according to claim 8, wherein said electrolyte support, the gas channels are formed in a straight line structure or a lattice structure.

10. (Currently Amended) The cell according to claim 8 [[or 9]], wherein cross sections of the downwardly bent portions and the straight structure or the lattice structure of gas channels formed in the electrolyte support are formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle or have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.

11. (Currently Amended) The cell according to ~~any one of claims 1 ~ 7~~ claim 1, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

12. (Currently Amended) The cell according to ~~any one claims 8 ~ 10~~ claim 8, wherein an electrolyte plate is produced in a structure in which four sides or two sides of corners are downwardly bent in an inverted U shape using an assembling powder of about 10μm through about 100μm using one or more solid oxide electrolyte materials selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, and lanthanum perovskite group, and the electrolyte support is implemented in such a manner that the single cells formed by coating a fuel electrode in a lower portion of the electrolyte flat portion and an air electrode in an upper portion of the electrolyte are formed in a triple layer or multiple layer structure.

13. (New) The cell according to claim 3, wherein the cross sections of the downwardly bent portions and the straight structure or the lattice structure of the gas channel formed in the fuel electrode support may be formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle, or may have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.

14. (New) The cell according to claim 6, wherein cross sections of the downwardly bent portions and the straight structure or the lattice structure of gas channels formed in the air electrode support are formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle or have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.

15. (New) The cell according to claim 9, wherein cross sections of the downwardly bent portions and the straight structure or the lattice structure of gas channels formed in the electrolyte support are formed in a trapezoid shape in which a rectangular protrusion is formed at an obtuse angle and an acute angle or have a structure in which rectangular, polygonal and/or circular protrusions are combined in a combined structure for thereby operating as gas channels.

16. (New) The cell according to claim 2, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

17. (New) The cell according to claim 3, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

18. (New) The cell according to claim 4, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

19. (New) The cell according to claim 5, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

20. (New) The cell according to claim 6, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

21. (New) The cell according to claim 7, wherein one or more electrolytes selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, lanthanum perovskite group are coated and heat-treated in a support in which four sides or opposite two sides of corners are downwardly bent in an inverted U shape for thereby producing an electrolyte having a thickness of about 5μm through about 50μm, and said support is formed of a triple layer structure or a multiple layer structure in which an air electrode is coated on an upper portion in which the electrolyte is coated, and a fuel electrode is coated in a lower portion in which the electrolyte is coated.

22. (New) The cell according to claim 9, wherein an electrolyte plate is produced in a structure in which four sides or two sides of corners are downwardly bent in an inverted U shape using an assembling powder of about 10μm through about 100μm using one or more solid oxide electrolyte materials selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, and lanthanum perovskite group, and the electrolyte support is implemented in such a manner that the single cells formed by coating a fuel electrode in a lower portion of the electrolyte flat portion and an air electrode in an upper portion of the electrolyte are formed in a triple layer or multiple layer structure.

23. (New) The cell according to claim 10, wherein an electrolyte plate is produced in a structure in which four sides or two sides of corners are downwardly bent in an inverted U shape using an assembling powder of about 10μm through about 100μm using one or more solid oxide electrolyte materials selected from the groups comprising ZrO_2 group, CeO_2 group, Bi_2O_3 group, and lanthanum perovskite group, and the electrolyte support is implemented in such a manner that the single cells formed by coating a fuel electrode in a lower portion of the electrolyte flat portion and an air electrode in an upper portion of the electrolyte are formed in a triple layer or multiple layer structure.